GOVERNMENT OF TELANGANA ABSTRACT

Agriculture and Cooperation Department – Implementation of the Scheme of "Farmers Field Schools and Exposure Visits" in the State- Approval of Project and Guidelines – Accorded – Orders - Issued.

AGRICULTURE AND COOPERATION (AGRI.II) DEPARTMENT

G.O.Rt. No.132

Dated 12-03-2015 Read the following:-

- 1. From the Director of Agriculture, Telangana, Hyderabad Lr.No.Plg(2) 5/ 2014, Dated 23-01-2015.
- 2. Govt.Memo.No.537/Agri.II(1)/2015,Dt.03-02-2015.
- 3. From the Director of Agriculture, Telangana, Hyderabad Lr.No.Plg(2) 5/ 2014, Dated 24-02-2015.

ORDER:

In the references 1st and 3rd read above, the Director of Agriculture, Telangana, Hyderabad has stated that the Government have allocated Budget towards Implementation of the Scheme of "Farmers Field Schools and Exposure Visits". Accordingly, the Director of Agriculture, Telangana, Hyderabad has submitted the project proposals along with guidelines and requested to accord approval for implementation of the Scheme.

- 2. Government, after careful examination of the proposal, hereby accord approval for implementation of the Scheme of ""Farmers Field Schools and Exposure Visits" in the State, as per the Scheme and guidelines annexed to this order.
- 3. The Director of Agriculture, Telangana, Hyderabad shall take further action in the matter.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF TELANGANA)

DR.POONAM MALAKONDAIAH APC & PRINCIPAL SECRETARY TO GOVERNMENT

Τo

The Director of Agriculture, Telangana, Hyderabad Copy to:-

The P.S. to Minister(Agri.&AH)

The P.S. to Principal Secretary to Govt.(Agriculture)

The Finance (EAC / EBS.II) Department.

The Accountant General, Telangana, Hyderabad

The Pay & Accounts Officer, Telangana, Hyderabad

The Director of Treasuries & Accounts, Telangana, Hyderabad SF/SC

//FORWARDED BY ORDER//

SECTION OFFICER

ANNEXURE

Annexure to G.O.Rt.No.132,A&C(Agri.II)Dept. Dated 12-03-2015

GUIDELINES FOR IMPLEMENTATION OF FARMER FIELD SCHOOLS & EXPOSURE VISITS

FARMER FIELD SCHOOLS

All the District Joint Directors of Agriculture in the Telangana State will implement the Farmer Field Schools under NSP as per the following guidelines:

The main objective of FFS is to "reduce the cost of cultivation and increase the productivity duly empowering the farmers to take economical decisions " by adopting practices of Integrated crop Management.

Integrated Crop Management is an approach to farming which aims to balance production with economic and environmental considerations by means of a combination of measures including crop rotation, cultivations, appropriate crop varieties and careful use of inputs.

ICM= INM+ IPM + Agronomic practices including farm mechanization.

The main principles of FFS are

- Grow a healthy crop
- > Conserve natural enemies
- ➤ Conduct regular (weekly) field observations
- Farmers understand ecology as expert in their own field

The FFS programme is being done from seed to seed, so that the participants can observe and analyze the dynamics of crop ecology across the season. Field observations will be done on any fixed day of the week.

Size of the FFS : 10 ha.

No. of Farmers : 30

FFS is in the crop field and study is being done in the field of one of the trainee participant farmers in about 2 acres. In this field the trainees will conduct simple experiments/validation trials such as comparison between ICM & Farmers practice, study on plant compensation and make observations for Agro-ecosystem Analysis in crop etc., and these are usually carried out by the group.

- 1. The training is fully field oriented, participatory and discovery based i.e., "learning by doing".
- 2. The training aims at teaching science to the farmer in his fields.
- 3. Training curriculum is based on local needs. What is relevant and meaningful is decided by the farmers.

FFS learning field

ICM	Field validation trails	Farmers practice
½ Acre	1.00 Acre	½ Acre

The FFS programme is to be conducted by the MAOs and AEOs in the selected villages during the year 2013-14.

The FFS has to be conducted by following the norms of schemes and the funds can be utilized from the concerned schemes. The field functionaries have to conduct the category wise FFS.

One FFS in each district irrespective of crop have to be organized solely for women by the FTC, the funds may be utilized from the scheme. The selected village and crop have to be informed by the DDA, FTC to the Dist. JDA so as to release the funds from the scheme.

Criteria for selection of village:

- > Select village where pesticide and fertilizer consumption is more.
- ➤ Where more number of production gaps are there and they are not being practiced the technology to bridge the gaps.
- ➤ The hamlet of the village can also be selected provided it should have largest area under cultivation of the major crop of the village.
- > Should be accessible.
- ➤ The SCP/TSP FFS should be organized in SCP/TSP Constituencies, preferably where the SCP/TSP Population is high .

Baseline Survey

The survey should be conducted in FFS village covering 10 farmers of FFS and Non-FFS at random. The survey should be completed immediately after the selection of FFS farmers and prior to conducting planning / FFS meeting. The baseline survey reports should be sent to the JDA concerned.

The findings of base line survey should be recorded in the FFS register. Based on the findings FFS curriculum should be developed by involving FFS farmers.

FFS Training site selection.

- 1. Select minimum of 2 acres (if possible three acres) of site in concurrence with farmer participants.
- 2. The field should belong to one of the FFS farmer. However, if two or three acres of land is not available with one farmer then two farmers with contiguous area may be selected.
- 3.It should be easily accessible and should not be too far from the FFS village.
- 4. The field should be as close as possible to the meeting place
- 5. Some shady areas should be nearer to the field to accommodate all the participants who will be working in groups.
- 6.No water stagnation in the field.
- 7. No abnormalities in the field.
- 8.Identify farmer who is willing to give the land for conducting field experiments and AESA..
- 9.He should agree to carry out the farming operations in ICM plot as per AESA decisions taken by the farmers.
- 10. He should agree to follow the schedule of farming operations as finalized by the farmers, in the farmers practice field.
- 11. He should agree to meet all the expenditure involved in both the fields except part of IPM inputs for pest management.
- 12. He should agree to allow the farmer participants to work in that field or to organize field day.
- 13. The facilitators should enter into verbal contract with the farmer collaborator in the presence of all the farmer participants.

FFS Curriculum

Based on the local needs and, in discussion with the selected FFS farmers, a general curriculum and schedule of activities shall be developed by the facilitators, prior to starting of the first FFS session. While developing the curriculum, the training objectives and quality indicators may be taken into consideration. The curriculum so developed at the beginning of the FFS will serve as the guideline for carrying out the FFS

activities. However, it should be remembered that changes in the curriculum topics/schedule of activities can be made depending upon the prevailing situation but this has to be done in consultation with FFS farmers.

The focus should be on the following four different areas in each session.

S.No.	Item	Topics	% Time
1.	Science and farmers	AESA, Insect Zoo, special topics	50
2.	Group dynamics and team building exercise	Team building, energizers, ice breakers	30
3.	Management	AESA follow up, work plan	10 + 10
4.	Organization aspects		

Typical FFS session:

The duration of each FFS will be 4-5 hours. The time to start FFS session may be finalized in consultation with the participating farmers. Preference may be given to organize FFS at morning as the insect activity is more during this period.

8.00am 8.30am	Review of previous week activities, briefing on the days activity Field observation on Agro Ecosystem.
9.45am	Short tea break.
10.00am	Energizer or group building exercise.
10.30am	Begin making agro-ecosystem analysis, drawing and discuss,
	management decisions.
12.00am	Each team presents results and group arrives at a consensus on
	management needs for the coming week.
12.30pm	Special topic
1.15pm	Review of the day, planning for next week, closure.

Selection of FFS Day

The schedule day of the FFS for each village should be finalized by the facilitator (ADA, MAO and AEO) in consultation with the selected farmers of the FFS (avoid market day). The scheduled days of the FFS as finalized should be furnished to the Dist. JDA, DDA (Monitoring officer), ADA(R) and C& DAs office. This schedule should be displayed in prominent place of the village, written in the black board painted in the village and also in MDO/MRO office.

The MAO should also take up other programmes like vermi- compost / INM, Seed Village Programme, Farm Mechanization and other departmental activities in these villages simultaneously.

FFS Session:

FFS	Activities		
Week	Acuvities		
1 st	Preliminary meeting with village Sarpanch, RMGs etc., Selection & Registration of farmers. Introduction to ICM & Baseline survey.		
2 nd	Soil sample collection and sending for analysis. Seed germination test, Seed treatment, Role of trap crop / intercrops like pigeon pea, Bio-diversity crop like Cow pea and boarder crops like Maize or sorghum.		
3 rd	Ballot box test, Analysis of results of seed germination test, Special topics on weed management, water management, Group Dynamics.		
4 th	Field Activity on Agro-Ecosystem , Special Topic on Fertilizer management.		
5 th	Introduction to Agro -Ecosystem analysis, Special Topic on sucking pests, Plant compensation experiments(25%,50% & 75%)		
6 th	Agro-Ecosystem analysis, Pit fall trap experiments(every fortnight), Special topics on Bio-pesticides(NPV,Bt,.),Group Dynamics		
7 th	Agro-Ecosystem analysis, Defoliation experiments(10%,50% & 75%)		
8 th	Agro-Ecosystem analysis, Special topics on pest management , Role of pheromones in plant protection, Insect Zoo activities, Group Dynamics.		
9 th	Agro-Ecosystem analysis, Field studies on natural enemies, Special topics on Disease management, Special topics on Topping, Insect Zoo activities		
10 th	Agro-Ecosystem analysis, Special topics on Helicoverpa, Spodoptera, Pink bollwarm, Stem borer and BPH management, Role of bird perches and Mud wasp perches, Role of Yellow sticky traps, Group Dynamics.		
11 th	Agro-Ecosystem analysis, Special topics on stem rot management, Sheath blight, blast, Insect Zoo activities.		
12 th	Agro-Ecosystem analysis, Special topics on sucking pests, Group Dynamics		
13 th	Agro-Ecosystem analysis, Special topics on Rodent management,		
	Identification of Rodents, Ecology of Rodents ,Preparation of Rodenticides		
14 th	Field Day, Training of Non IPM farmers. Distribution of certificates to IPM farmers, Discussion on post FFS activities.		

In long duration crops like Redgram initial classes will be 15 days interval and from flowering onwards classes can be weekly interval.

In case of cotton the last 4 classes will be 15 days interval.

Technical Up gradation in FFS

Under technical up gradation the FFS farmers should be trained in-

- a. Seed Germination test.
- b. Seed treatment methodology.
- c. Soil testing.
- d. Water testing
- e. The **bio-fertilizers** like Rhizobium and PSB (pulses & oil seeds), Azatobactor (cotton), Azospirillum(rice and maize) and micro nutrients as a part of INM should be used in all the FFS wherever possible.
- **f. Vermi-compost:** In each FFS village a vermi-compost unit may be organized as part of INM. As per the instructions given by the organic farming cell earlier.

- **g. Green manuring:** The green manure seeds which are supplied on subsidy in departmental programmes may be linked with FFS programme and ensure that the green manure seed should be supplied to the FFS farmers so as to use green manuring as part INM.
- **h. Zinc sulphates/Gypsum:** The zinc sulphate and gypsum which are being supplied on subsidy may be linked with the FFS programme and ensure to supply to the FFS farmers wherever possible.
- i. As a part of FFS, training also to be imparted on precautions to be taken while purchasing seeds, fertilizers and pesticides by the farmers.
- **j.** Preparation of NSKE and its use is compulsory in all FFS programmes.
- **k. Farm machinery :**The farm machinery supplied on subsidy should be linked to FFS programme. The machinery which is appropriate to the crop of FFS should be supplied in the FFS villages.

Monitoring:

The success of implementation of FFS programme depends on monitoring at various levels.

A. District Level:

- At dist level a monitoring cell should be formed in JDAs office for monitoring the FFS programme.
- The cell should consist of one DDA / ADA of JDAs office, one Agricultural Officer and one Sr. Asst.
- The JDA is responsible for monitoring the FFS programme in the dist.
- In addition to the JDA, regular monitoring should be done for effective implementation of FFS by Dist level officer such as DDA O/o JDA, DDA (FTC), DDA (sc). Each dist. level officer may be made in-charge for 3-4 divisions.
- These officers are supposed to visit all the allotted divisions in a month for which he is made in-charge.
- They should invariably visit at least one division in a week covering all mandals of the division.
- They should furnish a report on his visit and observations noted on the organization of FFS in the proforma communicated to the dist. JDAs immediately after return and submit a copy of the same report in every week to C & DAs office
- The monitoring is a mandatory to the dist. level officers.

Divisional Level:

- The ADAs (R) should monitor the implementation of FFS in his division duly visiting all the mandals under his jurisdiction in every week.
- They should submit weekly report to the dist. JDA under a copy to the DDA incharge of their division.

Mandal Level:

- The Mandal Agricultural officer should visit the FFS organized by AEOs in his mandal in every week besides conducting MAO FFS.
- MAO should submit weekly report to the ADA (R) and Dist. JDA.

Role of Department Officers under FFS programme:

1. AEO:

- a. Selection of villages for FFS.
- b. Should organize one FFS in his jurisdiction.
- c. Should be responsible for conducting FFS and documentation including maintenance of FFS register.

2. MAO

- a. Conduct one FFS in mandal in each season.
- b. Should monitor AEOs FFS.
- c. Should indent need based inputs to ADA(R).
- d. Maintenance of Registers and Documentation.
- e. Overall in-charge of FFS in their respective mandal.
- f. Arrangements may be made to AEOs for providing refreshments on FFS day duly utilizing the services of Village Samakhya wherever possible.

3. ADA:

- a. Responsible for timely supply of inputs as per indent placed by MAO
- b. Organize orientation training to AEOs at District level as per the instructions of JDA.
- c. Supervision of FFS at Divisional level
- d. Providing revolving fund to MAO for effective implementation of FFS programme as per the instructions of C & DA.
- d. He should also ensure that the voucher shall be furnished by MAO for the expenditure made with in a week and same shall be reimbursed with in 15 days after release of funds.
- e. He is responsible for effective monitoring and successful conduct of FFS under his jurisdiction

4. **DDA**:

- a) Overall **supervision of FFS activities in the allotted divisions** for which he is made in-charge for monitoring.
- b) **Monitor and supply inputs timely and quality check** of the material supplied including IPM kits.
- c) Monitor the **flow of funds for effective implementation** of the programme.

5. JDA:

- a. Overall supervision of FFS at Dist level
- b. Formation of FFS cell at dist level for monitoring the implementation of FFS and quality supply of inputs.
- c. Allotment of divisions to dist. level officers (DDAs O/o JDA,DDA(FTC),DDA (SC)).
- d. **Monitor timely supply of quality inputs** including IPM Kits and responsible for proper expenditure to be made and utilization of funds in various schemes for FFS
- e. Organize refresher / Orientation training programmes to all ADAs/MAOs and AEOs at districts level through FTC.
- f. Monitor the **flow of funds for effective implementation** of programme.
- g. Avoid conducting any meeting or trainings on FFS days.

6. Other Organizations:

- a. The services of the KVKs can be utilized in organizing FFS.
- b. The Labs of Prof. Jaya Shankar Telangana State Agricultural University can be utilized for Quality test of the inputs being supplied in FFS.
- c. Scientist from research stations and DAATT centers can be involved in organizing Farmer Field School programmes in the villages.

Evaluation:

Conduct Pre and Post ballot box tests to the farmers involved in FFS in order to assess the level of ICM related knowledge before and after the FFS.

Mid-Season Review:

After 8-9 sessions of FFS, the mid season review may be conducted at a convenient place chosen by the Dist.JDA/ADA.

Reporting:

The MAO should keep the records properly and send progress report on FFS to ADA (R) for every fortnight.

In turn ADA (R) should submit the mandal wise consolidated report to JDA for every month in the prescribed proforma. The JDA should furnish the monthly progress report in the prescribed format to the C & DA's office to reach by 2nd of every month.

Final report of each FFS including cost of cultivation on the proforma prescribed should be prepared by MAO & ADA of respective jurisdictions and send it to JDA and Commissionerate of Agriculture, Hyderabad office within a month after harvest of each FFS crop.

Documentation: The documentation should reveal -

- I. The purpose of the FFS,
- II. The yield gaps identified and the methods and materials used to bridge the gaps,
- III. **Results** found
- IV.In discussion compare the results of FFS and non FFS with special reference to yield gaps to overcome with suitable reasoning.
- V.Final conclusion along with opinion of the FFS farmers.

The documentation may be supported with the report with the relevant photographs, farmers' experience and remarks of the visitors and press clippings etc, should reflect in the FFS register maintained.

Field day:

At the end of the season, the participants should organize a Field Day before harvest or at the time of harvest in which local community members and local policy makers are invited to the field site. Typically, the facilitators remain in the background on this day as the participants run the programme. Graduation ceremonies in which certificates are awarded by local politicians can also be done at this time. The certificates should be prepared by the facilitator.

Other General guidelines:

- 1. Farmers should be involved in planning for the FFS right from the beginning.
- 2. All activities should be truly participatory.
- 3. All efforts should be made to promote ICM through local media and inviting local leaders to FFS.
- 4. The facilitator should maintain FFS register recording all the day's activity.
- 5. Conduct FFS more effectively to avoid excess use of nitrogenous fertilizers leading to toxicity problems and adequate emphasis shall be given for use of organic manures in order to reduce dependence on chemical fertilizers.
- 6. Field Level Training shall be conducted to the AEOs for organizing FFS more effectively.
- 7. Special measures to be taken to reduce vide spread dropouts
- 8. One Vermi-compost unit must be organized in FFS village as per the guidelines issued by Organic farming cell.
- 9. Ensure to organize SCP/TSP FFS separately in SCP/TSP Constituencies where SC/ST population is high.

- **10**. The FFS boards erected at village entry point and at the field site should be identical and size should be 4 fts x 3 fts. and should have information given in the guidelines.
- 11. Group photo of the respective FFS farmers should be sent to C&DA

Prominence of Literature and posters:

All the District Joint Directors of Agriculture in the Telangana State will be instructed for printing **of** the pamphlets on different crops and to distribute in the respective districts during the FFS programme to update the technical know how to the farmers.

Importance of literature:

- To upgrade and transform new technology to farmers through Pamphlets
- Booklets covering general and specific information on different crops.

B. Organization of Trainings:

• Importance of Training:

- For increasing the crop yields the important step is to develop and use viable mechanism to transfer latest knowledge and techniques from research to farmers and collect feed back to re-orient research on issues which are critical and limiting for increasing the crop yields.
- State Level workshop provides the **tips to follow and steps to take up in imparting training programmes at next level i.**e. district level training programmme, as the updated information may be provided by the resource persons from ICRISAT/Central Institutes/Agricultural University to strengthen the master trainers.
- This training programme empowers the technical know-how from seed to seed programme.
- On farm practical training to AEO's in specific crop
- Increases efficiency of the AEO's
- Reduced supervision
- Less wastage
- Help new employees in the department
- Group efficient

It is proposed to organize pre-seasonal orientation / refresher training programmes to the field level officers as follows:

a. State Level:

SAMETI will organize refresher training cum workshop for 3 days in all crops with aprrox. financial outlay of Rs. 1,04,650.00 at state level for the master trainers selected from each district @ 3 per district. Two master trainers (ADA/AO) who have trained in SLTP on FFS being organized by FAO / dept of Agriculture in previous years, one officer (ADA/AO) from FTC and AO (Tech. Asst) or ADA looking after FFS in JDAs office will be selected.

In turn these master trainers will impart training to the MAOs / ADAs and AEOs at district level.

b. District level

i. District Level Training Programme to ADA's and MAO's

Farmers Training Centre at District level will organize the District Training programme to All Divisional level ADA's, all MAO's and to all AEO's for 2 times i.e. (1)one training programme as pre seasonal training and (1) one training programme at the Middle of the season for mid season

b. Recapitulation Training Programme:

Farmer Training Centres at District level will organize the Recapitulation training programme to MAO's with an approx budget outlay of Rs.12,82,400.00 lakhs. As this Re-capitulation training programme helps to know the status of ongoing of the FFS programme in the respective districts.

c. Season Long Training Programme:

Farmer Training Centers at District Level will organize Season Long Training Programme to newly recruited AEO's @ 30 numbers at weekly one day with an approx. budget outlay of Rs.11,74,500.00 lakhs.

The SLTP will be conducted for newly recruited AEOs and also to the officers who are not well versed with the FFS programme through Master Trainers.

Exposure Visit & Other Office Expenditure

- Importance of the Exposure visits:
- **As Polambadi** is a Seed to Seed Programme,
- Exposure visits which empowers the master trainers as well as field officer for successful implementation of programme to extract information by interacting with the other farmers and technical know-how in different crops etc., and broader information and technical skills exchange take place between the two group as seeing is the believing.
- Exposure visits enable trainees from different regions to interact with and learn from each other allowing to view practical examples of successful integration of sustainable practices in farming communities.

a. 1.Exposure Visit to Master Trainers:

The Incharge officer of Polambadi Section O/o C&DA will organize the Exposure visit to 27 master trainers @ 3 from each district for 5 days to the outstate exposure visit programme to extract information by interacting with the other farmers and technical know-how in different crops etc.,

b. 1. Exposure visit to District level Officers:

Farmer Training Centre of the respective district will organize the exposure visit to 36 officers in each district for 5 days to the outstate exposure visit programme to one ADA, one A.O., and one A.E.O from each division for interacting with farmers, officers and practices as seeing is the believing with an approximate budget out lay of Rs.33,13,800.00

EXPOSURE VISITS

Introduction:

In Telangana State 55.54 lakh farmers are cultivating major 27 important agricultural crops in an area of 61.97 lakh hectares in Kharif and Rabi seasons. The Agricultural department is providing extension services regularly on various up dated Agricultural technologies to the farming community for improving their skills and knowledge for improving factors promoting productivity of the crops. Still there is gap in adoption of improved latest technologies from research to field level. To eliminate the gaps in adoption of technologies by farming community, Exposure visit is one of the tool that is used to facilitate learning by the farmers by seeing, it entails two or more groups where one is learning from the other. It promotes issues of good practices and a process of building on underlying, two groups may also be learning from each other.

By organization of Exposure visits people living in one place can visit another location to observe and learn from the other community's development activities. The purpose of exposure visits is to learn from the experience of others outside your own community, by direct interaction. Participating communities may be a short distance from one another, or in some cases, in different regions or even different countries.

Advantages of Exposure Visits:

- The visiting groups take very seriously lessons about the development activity being implemented and get first hand feedback. which are learnt from people who live in similar circumstances to themselves.
- Learning takes place in a real life situation, which allows visiting groups to ask questions
- It is practical, learning from experience (not theoretical).
- Often broader information exchanges take place between the two group

Objectives:

- To enable farmers and officers from different regions to interact with and learn from each other, allowing them to view practical examples of successful integration of sustainable practices in farming communities
- To learn from the experiences of others outside by direct interaction.
- To learn developmental activities being implemented practically from experience of other.
- To share and exchange information on broad way ..
- To build the confidence and decision making capability

<u>GUIDELINES FOR IMPLEMENTATION OF EXPOSURE VISITS SCHEME :</u>

- The Government has allocated an amount of Rs. 500.00 lakh under Normal State Plan towards Exposure visits scheme in Telangana State during 2014-15.
- It is proposed to organize exposure visits in 4 categories under *exposure visits* scheme during 2014-15 to empower more number of farmers, Officers in Telangana state on latest improved technologies in various agricultural strategies which are being practiced successfully in various districts, states.

PTO

- 4 Categories of Exposure visits are :
 - 1. Inter State Exposure Visits to Farmers
 - 2. With in the State Exposure Visits to farmers
 - 3. With in the District Exposure Visits to farmers
 - 4. Inter State Exposure Visits to Officers
- Selection of farmers for Inter State ,with in the state exposure visit will be finalized by the District Level Officers.
- Selection of farmers for with in the District exposure visit will be finalized at Division/ Block level
- Selection of Officers for Inter State exposure visit will be decided at district level by the District Level Officers.
- After each visit the group should be encouraged to give feedback on utility and applicability of the exposure visit.
- Documentation of the visits, Out come of the visits has to be maintained by District level Officers at District level.
- After conduct of visits the follow up action on the acquired technologies has to be done by the District level, Divisional level, Mandal Level officers for motivating farmers to adopt those technologies at farmers fields and to show the impact of those technologies to more no of neighboring farmers.
- The progress of the implementation of the scheme will be monitored and reviewed at Commissionerate level .

Dr.POONAM MALAKONDAIAH
APC & PRINCIPAL SECRETARY TO GOVERNMENT